Work Order ID 114652

March-11-14 2:53:36 PM

114652

Item ID: D5032-1
Revision ID:
Item Name: Doubler
Start Date: 07/03/2014 **Start Qty:** 96.00 *96*
Required Date: 12/03/2014 **Req'd Qty:** 96.00 *96*
Reference:

Accept *N900040100*

Setup **Start** *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Approvals: **Process Plan:** MLS **Date:** 14-03-12
QC: **Date:**
Tooling: **Date:**
SPC (Y/N): **Date:**

Run **Start** *NR1*
Stop *NR2*

Draw Nbr	Revision Nbr
D5032	A

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110						105		a	14-3-17
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg								
6061.040	Dwg Rev: A								
	Prog Rev: A								
	2-Deburr if necessary								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120						105		EL	14-3-17
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 114652

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Stop *NS2*
Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check **Memo**	0.00 DAS 27 9-89 0.00 14/3/17				105 Cam J			
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 **Memo**	0.00 0.00				105 JB 14-3-18			
150 *150* QC Quality Control	QC7-Inspect Chemical Conversion Coat **Memo**	0.00 DAS 27 9-89 0.00 14/3/18				105 Cam J			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

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Work Order: _____

Part No. _____

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Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
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☐ Instructions Incomplete/Unclear
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☐ Mislabeled
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☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 114652

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Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: ST130	0.00				105x	DAS 26 9-89	14-03-19	
160 Packaging	**Memo**	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00				_____	14-03-20		
170 QC	**Memo**	0.00							
Quality Control									

MCJ 14-03-19

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

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☐ Part Lost/Missing
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☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

March-11-14 2:53:25 PM

Work Order ID: 114652 *114652*

Parent Item: D5032-1 *D5032-1*

Parent Item Name: Doubler

Start Date: 07/03/2014 **Required Date:** 12/03/2014

Start Qty: 96.00 **Required Qty:** 96.00

Comments: IPP REV:A 13.12.20 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No				sf	323.7100		3			
M6061T6S.040									**	8	14-3-17		
6061-T6 .040 Sheet													

Location	Loc Qty	Loc Code	
MAT021	323.71		
m126350	51.3		
m126981	94.41		
m128422	178		3

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

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Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

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Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
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☐ Wrong Stock Pulled
☐ Other

DART AEROSPACE LTD	Work Order:	114652
Description: Doubler	Part Number:	D5032-1
Inspection Dwg: D5032 Rev: A		Page 1 of 1

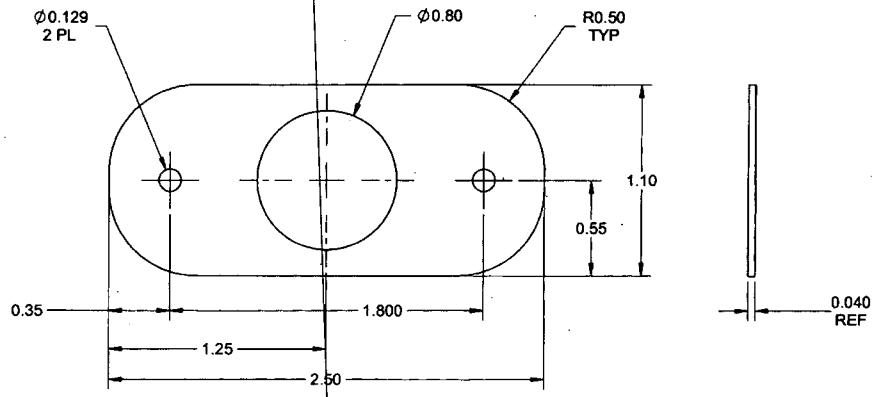
FIRST ARTICLE INSPECTION CHECKLIST

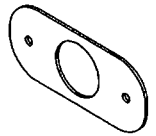
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.50	+/- 0.03	2.498	✓		✓ JRM05	
1.10	+/- 0.03	1.096	✓			
1.25	+/- 0.03	1.249	✓			
1.800	+/- 0.01	1.804	✓			
0.35	+/- 0.03	0.345	✓			
Ø 0.129	+0.005 -0.001	0.133	✓			
Ø 0.80	+0.010 -0.001	0.800	✓			
0.55	+/- 0.030	0.548	✓			

Measured by:	CEL	Audited by:	DAS 27 9.89	Preliminary Approval:	
Date:	14-3-17	Date:	14/3/17	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15





114652 MCJ
1403-12

RELEASED
2013-12-23
ISS ECN 13-705

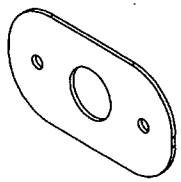
D5032-1 DOUBLER

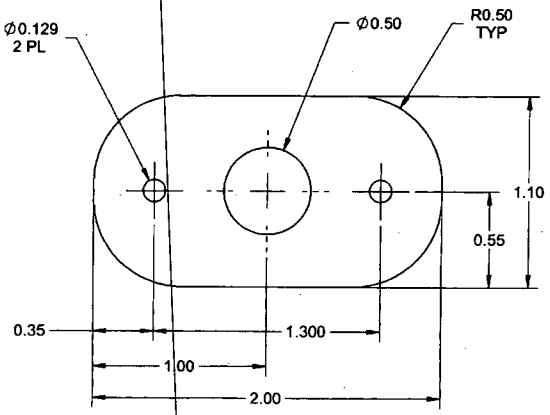
NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.01 lbs

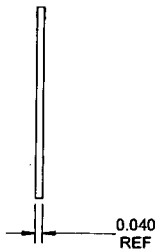
REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	13.12.09

DESIGN	RF	**DART AEROSPACE LTD**
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	JC	DRAWING NO. D5032 — REV. A
MFG. APPR.		SHEET 1 OF 2
APPROVED		TITLE: DOUBLER — SCALE: NTS
DE APPR.		
DATE	13.12.09	

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D5032-3 DOUBLER

RELEASED
2013-12-23
1>S

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.01 lbs

DESIGN	RF	**DART AEROSPACE LTD**
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D5032 REV. A
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE DOUBLER SCALE NTS
DE APPR.		
DATE 13.12.09		

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